

City of Redondo Beach

I. Assessment of Program Effectiveness FY 2011-2012

A. *Attach a summary of the effectiveness of your storm water management program. This summary should include, at a minimum, the following:*

1. *An assessment of your agency's compliance with permit requirements, based on your responses to the questions in this form.*

The City is continually working to ensure compliance by meeting deadlines and/or modifications of policies or procedures. The biggest challenge for the City maybe locating the source of pollution. Research has shown that local conditions such as birds are the biggest contributors to the beach bacteria problem as well as the number of beach goers in the summer which can contribute greatly to the increasing level of the bacteria when the dry-weather sampling is being conducted. The dry weather bacteria TMDL compliance has been accomplished by installation of dry-weather diversions at the outlets. This method is expected to divert the bacteria prior to mixing with the wave wash.

The City completed the installation of a low flow diversion facility on the Sapphire Street storm drain during dry weather year round. The facility diverts summer and winter dry weather flow through a biofiltration (Filterra tree basin) before it is infiltrated into the ground.

2. *Descriptions of any evaluation methods that your agency uses to determine the effectiveness of your storm water management program.*

The Bacteria TMDL Implementation Plan includes tasks which will help evaluate the effectiveness of the City's program. Although, the data may not be directly associated with the Cities' storm water program, the Bacteria TMDL monitoring program may also be perceived as a method to evaluate effectiveness.

3. *A summary of the strengths and weaknesses of your agency's storm water management program.*

The City's strength is in the ability to get the involved agencies interested in coordinated efforts in order to get projects moving.

4. *A list of specific program highlights and accomplishments.*

- *The City is the lead agency for Jurisdictions 5&6 of the SMBBB TMDL, a group effort that developed the joint monitoring and the Implementation Plan to comply with the TMDL's. The Implementation Plan includes Programmatic and structural programs and BMPs. These tasks have been individually distinguished and separately assigned with specific deliverables for proper implementations.*
- *The "Restaurant Certification Program", was launched and developed. The city jointly with the Santa Monica Bay Restoration Commission and the neighboring agencies implemented the "Clean Bay Restaurant Certification Program". This program has been designed to target restaurants and modify the operator's behaviors by providing incentives to encourage the implementation of appropriate BMPs.*
- *Clean Bay Restaurant Certification Student Participation program- Participants on this field trip included 26 students from a Redondo Union High School AP Environmental Science class and 8 students from Parras Middle School's Club Earth. Each student group was taught storm water quality management in the form of Best Management Practices for a restaurant's indoor and out door areas. Fats, oils and*

grease handling included use of grease removal devices and proper storage and recycling of used fry oil. Runoff pollution control included maintaining trash bins, storage areas and parking lots. This field trip helped the students understand, appreciate and remember the importance of pollution prevention. The restaurants were representative of corporate owned establishments (McDonald's, Panda Express, Subway) as well as small family owned (The Standing Room, Ham Supreme Shops). The students were given posters and brochures for further class room discussion and reinforcement of practices.



- *Programmatic tasks such as outreach to schools, graphic art contest, conducting a survey, design of inspection manual, inspectors round table, Parks and Recs activities evaluation and checklist, website design, compiling a list of available stormwater educational videos and DVDs, identifying appropriate speakers, designating targeted audience, developing restaurant and pet waste BMP brochures, website design, installation and monitoring it have been the main accomplishments of the Implementation phase of the Plan.*
- *The City has also started implementing the structural BMP tasks of the Plan by conducting initial studies and obtaining samples to determine the most adequate catchments for such BMPs. The study included samples of dry weather at various locations of the storm drain system within the Jurisdictions as wells as samples near the sanitary sewers to determine any possible leakages. The J5/6 agencies have already completed Phase I of the Site-Specific Structural BMP management approach of the IP utilizing available grant funding to pilot various structural BMPs. Consistent with Phase II of the Site-Specific Structural BMP management approach of the IP, evaluation of the performance of these pilot projects were completed. Based on experience with the BMP pilot projects, the agencies decided to move forward with Phase III of the Structural BMP management approach utilizing infiltration-based structural BMPs in the two high priority drainage areas if funds are available. A structural BMP siting study is underway and the study was completed in FY 11/12.*
- *The structural BMPs for the IP are a major component in achieving compliance with the SMBBB TMDL. However, it is anticipated that the Programmatic Solutions and Source Identification and Control components will also help achieve compliance through less intrusive, less expensive routes and therefore it should not be necessary that 100% compliance be achieved with the Structural BMPs alone. A full report of findings is available at the City.*
- *The City has inspected the restaurants regularly with the goal of visiting each establishment at least twice per year. This is far above and beyond the NPDES permit requirement of once every thirty months. The critical sources have also been the target establishments to be inspected by the City at a minimum of once every thirty months.*

- *The City has received a state grant for \$600,000 to install structural BMPs designed to reduce the accumulation of trash. The construction of the first BMP continuous deflection system (CDS) was completed in November of 2002. A second CDS unit was installed in Oct. 2003. A Third CDS unit was installed in April 2005 and a fourth was installed in May 2005.*
- *The \$350,000 State Grant was received for improving water quality around the City's Municipal Pier. Improvements funded by the grant include replacing sewer mains under the pier, installation of a fish cleaning station, constructing covered trash enclosures and replace trash receptacles on the pier. Installation of a low flow diversion on a storm drain that discharges under the pier was completed in April 2005.*
- *The City has continued the pet waste awareness program in conjunction with the animal control and pet related businesses (i.e. veterinarians, pet stores). The City's website provides helpful tips for the pet owners. The City has an on-going program to hand out free pet waste collection bags at the City Engineering Counter.*
- *The City's Quarterly Newsletter ads have published information regarding the City's storm water program as well as promoting the various related events and helpful tips.*
- *The Mayor and City Council formed a Water Quality Task Force in August 2005 made up of a diverse cross section of the community include individuals from teachers, youth, boaters, non-profit, general public, chamber of commerce, and harbor businesses. The Task Force is to provide the City Council with recommendations that will address water quality in the harbor and other waterfront areas of the City.*
- *The Green Task Force was established in January 2007, for the purpose of improving community knowledge of environmental topics and encouraging practices which protect the environment. This task force has been served as a model in the region which considers the tremendous growth of interest in green issues and environmental concerns.*
- *The City council approved an increase in the wastewater sewer user fee. This fee increase will help fund new State sewer system operational mandates to reduce sewer overflows.*
- *The City has obtained a permit from the Los Angeles County Beaches and Harbors Department to install a Dry-Weather diversion facility to stop all discharges from the storm drain during summer.*
- *The City installed two pilot projects in the harbor area. These projects include the installation of trash filters in the drain inlets and re-routing roof gutters on the pier so that they don't directly discharge in to the ocean. Construction was completed in February 2010.*
- *The City has worked with the Sanitation District and the Los Angeles Conservation Corps to conduct a study of ocean water quality around the pier in order to identify the source or sources of bacteria. This study was completed in February 2010*
- *The City adopted the Non-Smoking Beach Ordinance*
- *The City has installed thirty eight (38) smart manhole covers that monitor the sewer level and alarm the City when the level rises.*
- *Rain Water Harvesting is an important means of helping meet the water needs of Southern California. The facility was made operational in May 2011 and has diverted dry weather flow for infiltration into the ground. However due to problems with the storage tank water has not be captured for use in of irrigating Alta Vista Park. The facility can divert and capture up to six million gallons of rain water a year for irrigation use or infiltration into the underground soils. Diversions from the storm*

drain system will reduce the amount of rain water, along with the bacteria and other pollutants it carries, from being discharged into the Santa Monica Bay – thus improving water quality and reducing the number of days bacteria concentrations in the water exceed healthful standards. Since December 2011, when diversion recorder keeping began, the facility has diverted 1.6 million gallons of rain water and urban runoff.

5. *A description of water quality improvements or degradation in your watershed over the past fiscal year.*

As part of the Santa Monica Bay Beach Bacteria TMDL – Dry Weather, the City conducts water quality monitoring at five locations. These locations could potentially receive dry weather runoff from watersheds that partially or in whole are within the boundaries of Redondo Beach.

The improvement and/or degradation of the water quality can be better assessed after implementing the BMPs as tasked in the Bacteria Implementation Plan. The ongoing monitoring data results are being reported to the RWQCB for any water quality improvements or derogation analysis in the watershed. The agencies will also address the changes in the water quality as the Implementation Plan progresses by reducing the target pollutants.

6. *Interagency coordination between cities to improve the storm water management program.*

The City continues to coordinate with the municipalities in Jurisdiction five and six of the SMBBB TMDL to ensure cooperation amongst agencies as the monitoring and Implementation plan phases continue.

7. *Future plans to improve your agency's storm water management program.*

The focus of the City's future plan is to continue implementing the Permit and any TMDLs related tasks.

8. *Suggestions to improve the effectiveness of your program or the County model programs.*

Suggestions have been made through the Permit negotiations and comments.

- B. *On a scale of 1 to 10 (10 being full implementation of requirements by their deadlines), rate your municipality's level of compliance with Order No. 01-182.*

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- C. *List any suggestions your agency has for improving program reporting and assessment.*

Avoid duplications of the questions; delete questions regarding the expired programs. Consider group comments while developing the new Permit